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Report to WA Department of Ecology
Phase 3 work conducted under Children's Safe Products Act (CSPA)

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Phase 3 work was conducted by the WA Department of Health (Health) between January and June 2010 under contract to the WA State Department of Ecology (Ecology). Ecology contracted with the University of Washington Pediatric Environmental Health Specialty Unit (PEHSU) in April 2010 to review and assist on the Phase 3 work. This report covers work performed by Health including our collaboration with PEHSU. Acronyms and abbreviations used in the report are defined in Appendix A.

As described in detail below, Health and PEHSU performed two main tasks for Ecology as part of the Phase 3 process:

1. Review toxicological and exposure data for each chemical to ensure that each meets the criteria for CSPA listing.
2. Recommend a reporting trigger for each listed chemical.

Task 1

Since Ecology relied on a number of previously published lists and ratings of hazardous chemicals to prioritize chemicals under CSPA (Phase 1 and 2), the first task was to ensure that CSPA and Phase 2 selection criteria had been met for each chemical selected in Phase 2. Health led on this task with significant collaboration from PESHU on review of endocrine disrupting chemicals.

A. Error check on phase 2 scorecards:

In Phase 2 of the prioritization process, PEHSU developed a framework for evaluating chemicals, and Ecology created a specific scoring system to prioritize them. Using this system, Ecology selected 66 as Chemicals of High Concern for Children (CHCC) for

inclusion on a draft reporting list. Health conducted an error check of the scorecards for each of the 66 chemicals on the draft list to ensure that they met the requirements of both the CSPA law and Ecology's ranking system. Health focused its efforts on criteria that were key in prioritization of the chemical in phase 2 (e.g. resulted in a "Known" rating for exposure or a "Severe, Worst or Bad" rating for toxicity information). On the toxicity side, we identified corrections to 16 scorecards. In nine score cards the error changed the ratings for carcinogenicity or reproductive and developmental toxicity but only one chemical, benzoic acid, had no remaining toxicity endpoints of concern in Ecology's ranking system. On the exposure side, our error check found mostly omissions of data published in the 2009 Danish Survey of Chemical Substances in Consumer products for Two Year Old Children (Survey No. 102) and the Centers for Disease Control and Prevention Fourth National Report on Human Exposure to Environmental Chemicals (2009). There were other minor corrections but none resulted in a change from "Known" exposure. All corrections identified were reported to Ecology. Health recommends that benzoic acid be dropped from the CSPA reporting list and that Phase 2 scorecards be corrected for stakeholders.

B. Investigation of chemicals with weaker evidence for inclusion on the CSPA reporting list.

Phase 2 used a range of information sources to rank the chemicals into five categories of toxicity (i.e. "Worst", "Severe", "Bad", "No", and "No Info"). The categories primarily reflect the strength of evidence that a chemical had a particular type of effect rather than the degree of toxicity. In Phase 3, we reviewed the various sources and the underlying data used to document the rating.

We generally found high quality scientific evidence supporting carcinogenic potential of chemicals. A number of respected government-sponsored bodies have evaluated and rated the carcinogenicity of hundreds of chemicals. IARC; NTP; EPA IRIS; and the EU, Existing Substances were found to have solid supporting documentation for their cancer ratings. CA OEHHA (Prop 65) had high quality independent documentation when chemicals had been evaluated and listed by their CIC and DART scientific committees. Other chemicals listed under Prop 65 relied primarily on assessments of other authoritative bodies such as IARC, EPA, or NTP. The Globally Harmonized System (GHS) of classification and labeling of chemicals is a recent United Nations effort to create a uniform system of hazard labeling for chemicals being used, transported and disposed of throughout the world. The only comprehensive application of the GHS criteria available was a screening of 1,500 chemicals conducted by the Japanese GHS Inter-ministerial Committee in 2006. This source was found to be less robust than the others. Documentation of GHS ratings was typically brief and not comprehensive. Also the Japanese classifications did not consider the amendments to GHS in the Second or Third Revised Editions (published 2007, 2009). Two chemicals made the draft list based only on GHS and CA Prop 65 listings for cancer: estragole (CAS 140-67-0) and C I solvent yellow (CAS 842-07-9). For these two chemicals, Health reviewed data

considered by OEHHA and in the wider published literature before determining that the criteria for CSPA were met.

The strongest sources of developmental and reproductive toxicity information used in Phase 2 were NTP-CERHR evaluations and the EU Existing Substances risk assessments. REPROTEXT generally had well documented data but its hazard ranking was often specific to pregnant women and their fetuses with uncertain or limited relevance to children: the focus of the CSPA. For example, acetaldehyde is a metabolite of ethanol and may be involved in fetal alcohol poisoning. For this reason, it is ranked Class A- for reproductive hazard by REPROTEXT. Since the development of fetal alcohol syndrome is specific to a certain window of fetal exposure, it has limited relevance to a ranking for products marketed for use by children. GHS rankings were again, not as robust a source as the NTP and EU documents. We reviewed the wider literature for chemicals that made the list solely because of REPROTEXT or GHS ratings for reproductive or developmental endpoints (e.g., molybdenum compounds (CAS 7439-98-7) and methyl ethyl ketone (CAS 78-93-3)). Literature reviewed included: ATSDR Toxicological Profiles, Health Canada Priority and Domestic Substances risk assessments, documents supporting OEHHA Maximum Allowable Dose Levels (MADLs), HSDB, and peer reviewed literature in Pub Med. As a result, we recommend that propylene glycol (CAS 57-55-6) be dropped from the list for insufficient evidence of reproductive toxicity.

There were 22 chemicals on the draft CSPA list ranked category 1 or 2 endocrine disruptors in the European ESIS system. Nine of these had other endpoints of concern and 13 were listed on CSPA solely because of their endocrine disrupting potential. We found that the evidence for each chemical in the European database was informative but not comprehensive and apparently not updated since 2006. It served as an acceptable starting point for inclusion on the CSPA reporting list but Health and PEHSU determined that additional literature review to assess the evidence would be useful.

Endocrine disruptors were reviewed jointly with PEHSU scientists because of their added expertise in this area. Relevant published literature about the twelve remaining chemicals on the CSPA list solely for endocrine disruption was reviewed. All twelve were determined to meet the criteria of the CSPA law and remained on the list.

We also reviewed chemicals when the Phase 2 exposure ranking was based on information not strongly related to children or the use of children's products. This included chemicals whose exposure ranking relied primarily on detections in biomonitoring studies. We examined consumer product ingredient databases, the Danish and Dutch Surveys of chemicals in children's products, readily available information about known uses of chemicals in products or product manufacturing processes, Chemical Abstract services, and biomonitoring studies. As a result, we recommend that two chemicals be eliminated from the CSPA list. Mono-2-ethyl hexylphthalate or MEHP (CAS 4376-20-9) is a mammalian metabolite of DEHP: a compound already regulated under the federal CSPIA. Diethyl ether (CAS 60-29-7) is a known ingredient in wart medicine only and unlikely to be in children's products covered by CSPA. The rationale for dropping each chemical is in Appendix B.

C. Key issues identified from the review process:

Chemical use data: We researched the likely uses of the listed chemicals to better understand their presence in children's products. We had help in this task from Russell Dills, PhD, Director of the UW Environmental Health Laboratory and Trace Organics Analytical Center in Seattle. We found that 27 chemicals on the list are probably not added as ingredients during final production of children's products. They appear to remain from upstream use in production of feed stocks and components. Examples are the organic compounds (e.g. benzene, ethylbenzene) typically used as solvents or chemical intermediates and monomers (e.g., styrene, acrylonitrile) used to make polymers or copolymers common in children's products. Chemicals like phthalates have multiple uses and may be added directly as fragrances in personal care products or used as plasticizers in feedstock for plastic components of children's products. Other chemicals like the N-nitrosamines are contaminants in rubber production and are not used intentionally at any stage of the process. The broad definition of "intentionally added" proposed by Ecology should cover the range of these chemicals in children's products.

Ranking of the list: As public health scientists we were interested in ranking the chemicals relative to their concern for public health but did not have time to complete the process. The CSPA draft list contains chemicals with a wide variety of toxicity and exposure profiles. Some chemicals are very potent and others appear to require large doses for any effect. Some chemicals were widely found in children's products while others had limited evidence of exposure potential. We also found that many listed chemicals had other endpoints of concern (e.g. neurotoxicity, respiratory irritation, dermal sensitization) that occurred at lower concentrations than the endpoints prioritized in Phase 2 (i.e., cancer and adverse effects on reproduction, fetal/child development, and the endocrine system). Ranking based on the lowest concentration associated with any adverse effect would be most protective of children. Health collaborated with scientists at PEHSU to rank the chemicals by likelihood of exposure through children's products based on the information available. In the future, our ranking of exposure through children's products could be combined with a ranking by toxicity for a total hazard score. However, current uncertainty in exposure for many chemicals would yield only a general estimate at best. A better estimate would be possible after data on the frequency and the quantities of these chemicals in children's products is available through the CSPA reporting requirement. Information gathered through the reporting process would also facilitate the evaluation of the potential hazards that arise from mixtures of two or more chemicals present in children's products.

Task 2: Recommendations for reporting triggers

The CSPA law requires manufacturers to report information about the quantities and use of CHCCs in a wide spectrum of children's products. Ecology intends to establish

reporting triggers which are a threshold concentration of a CHCC in a children's product or product component below which reporting is not required. From a public health perspective, the lowest concentration measurable would have been valuable for the purpose of better understanding exposures to the chemicals and evaluating the hazards from children's products. However, Ecology requested that Health and PEHSU explore frameworks for setting reporting triggers that were not based on method detection limits. We investigated the following frameworks: the California Safe Cosmetics Act, CA OEHHA Safe Harbor Levels, and the CA Green Chemistry Safer Consumer Products Initiative. None of these efforts provide health-based reporting limits in consumer products. The CA Safe Harbor Levels set health-based exposure limits but require manufacturers to calculate the chemical concentration in a specific consumer product associated with this level through an exposure assessment process. Our team was not able to develop health-based triggers that would cover the myriad product types, product uses, and product matrices covered by the CSPA law due to: insufficient time, limited resources, and limited chemical use and exposure data. We discussed this issue at length as a team and made the decision to recommend reporting triggers that were based primarily on concentrations that have been previously reported in children's products and materials from which they are likely constructed. When no data were available we relied on what we might expect to see based on known use of the chemical.

The proposed reporting triggers in Appendix C are not based on levels of health concern. Instead, they were derived from information about: quantities of chemicals detected in testing of children's products, ingredients listed on consumer product labels and databases, background concentrations typical in the home or environment, exposure in children as evidenced by biomonitoring, and chemical use. We consulted these information sources, among others:

1. Data available from testing of children's products by the Dutch and Danish governments.
2. Ingredient searches in the Household Products Database by the National Library of Medicine and the Skin Deep Database compiled by the Environmental Working group.
3. Data on chemical use, children's exposure, and background concentrations in the environment contained in risk and exposure assessments conducted by ATSDR, CA Office of Environmental Health Hazard Assessment, EPA, NTP, IARC,WHO, Health Canada, European Chemical Substances Information System (ESIS) and other EU publications.
4. Evidence of exposure from human biomonitoring data primarily from NHANES but occasionally from other peer-reviewed studies.
5. Information on chemical regulations provided to Ecology by industry sources.

Toxicology data and established levels of known health concerns were sometimes used broadly by the group to influence the trigger. For example, the level of health concern was high in the case of N-nitrosodimethylamine: a potent rodent carcinogen with an OEHHA Safe Harbor limit of 0.04 µg/day. We set this trigger at 1 ppb to capture the low µg/kg concentrations of this contaminant reported previously in infant baby bottle nipples.

Many chemicals on the list have multiple uses in product manufacturing. They may be used as a chemical intermediate, used to make product source material, or directly added to the finished product. Our triggers attempted to capture chemicals present for a broad range of reasons and uses.

When little data were available we erred on the side of caution with a lower reporting trigger. If data become available through CSPA which indicate concentrations in children's products are generally higher, these reporting triggers could be adjusted upwards.

Recommendations

- Remove benzoic acid from the CSPA reporting list and make other identified corrections to the scorecards for stakeholders.
- Remove propylene glycol from the CSPA reporting list because of insufficient evidence for reproductive toxicity.
- Remove diethyl ether and MEHP from the CSPA reporting list for insufficient evidence of exposure potential through products covered by CSPA.
- PEHSU and the Health team recommend that Ecology consider adding lead, phthalates, and cadmium to the reporting list as this would provide valuable information about the current use of these substances in children's products.

Appendices:

A. List of abbreviations and acronyms
B. Rationale for dropping three chemicals
C. Reporting triggers

Appendix A: Abbreviations and Acronyms

ATSDR	Agency for Toxic Substances and Disease Registry
CDC	Centers for Disease Control and Prevention, US Department of Health and Human Services
CHCC	Chemicals of High Concern for Children, term defined in the Washington CSPA law
CIC	Carcinogen Identification Committee of OEHHA's Science Advisory Board for Proposition 65, CA.
CSPA	Children's Safe Products Act, Washington law passed in 2008
CSPIA	Consumer Product Safety Improvement Act, federal law that restricts certain chemicals in children's products
DART	Developmental and Reproductive Toxicant Identification Committee of OEHHA's Science Advisory Board for Proposition 65, CA.
Ecology	Washington State Department of Ecology
EPA	US Environmental Protection Agency
EPA IRIS	Integrated Risk Information System, EPA
EU	European Union
ESIS	European Chemical Substances Information System, Institute for Health and Consumer Protection, Joint Research Centre, European Commission
GHS	Globally Harmonized System of classification and labeling of chemicals, United Nations
Health	Washington State Department of Health
Health Canada	Canadian Health Agency
HSDB	Hazardous Substances Data Bank, US National Library of Medicine
IARC	International Agency for Research on Cancer, World Health Organization
NHANES	National Health and Nutrition Examination Survey conducted by CDC
NTP	National Toxicology Program, National Institutes of Health, US Department of Health and Human Services
NTP- CERHR	Center for the Evaluation of Risks to Human Reproduction at NTP
OEHHA	Office of Environmental Health Hazard Assessment, one of five agencies within California EPA.
PEHSU	Pediatric Environmental Health Specialty Unit, University of Washington
PubMed	Search engine for biomedical literature operated by US National Library of Medicine
REPROTEXT	Private data base of general toxicity and reproductive effects of chemicals maintained by Thomsen Reuters Health Care, available through Micromedex

Appendix B:
Rationale for Dropping Three Chemicals from Draft CSPA List

Propylene Glycol (CAS 57-55-6)

Summary: We found evidence of wide consumer exposure to propylene glycol but little evidence of reproductive toxicity as assessed by ATSDR (1997), NTP Center for the Evaluation of Risks to Human Reproduction (2004), or EPA (2006). It was therefore removed from the CSPA reporting list.

Propylene glycol is used in food, therapeutic drugs, cosmetic creams, toothpaste, suntan lotions, and other personal care products. It is used as a disinfectant in restaurants and hospitals. It is used in deicing fluids, antifreeze, artificial fog/smoke machines, room deodorants, and liquid detergents (EPA 2006, NTP 2004). It is used to help preserve ova used in animal and human *in vitro* fertilization and is used as a negative control in reproductive studies in animals (REPROTEXT, 2009). Estimated US consumption of propylene glycol is 34 mg/kg bw/day for an averaged sized adult (NTP 2004).

Propylene glycol passed Phase 2 based on a rating of "B" in REPROTEXT for mixed reproductive effects in animals and no human data. This rating was based primarily on feeding studies that showed very high levels in the diet (30%) could disrupt reproduction in rats. A lower dose of 7.5 % in the diet was not associated with disruption in rats. NTP studies in mice, rats, hamsters, and rabbits did not show developmental or reproductive effects at dietary doses over 1,000 mg/kg bw/day. This included an experiment with continuous exposure over two generations of mice at 10,000 mg/kg bw/day. The NTP Center for the Evaluation of Risks to Human Reproduction expert panel concluded that the data were sufficient to conclude that propylene glycol was not a reproductive or developmental toxicant (NTP 2004). EPA came to a similar conclusion when they identified "no endpoints for concern for oral, dermal, or inhalation exposure to propylene glycol and determined that the toxicological database is complete and sufficient" (EPA 2006).

References:

ATSDR Toxicological Profile for Propylene Glycol (1997)
http://www.atsdr.cdc.gov/toxprofiles/tp189-c2.pdf.

National Toxicology program (NTP), Center for the Evaluation of Risks to Human Reproduction (CERHR). Monograph on the potential human reproductive and developmental effects of propylene glycol. March 2004.
http://cerhr.niehs.nih.gov/chemicals/egpg/propylene/PG_Monograph.pdf

EPA Reregistration Eligibility Document for Propylene Glycol (2006)
http://www.epa.gov/pesticides/reregistration/REDs/propylene_glycol_red.pdf

"Propylene Glycol" in REPROTEXT Database Version 5.1 Greenwood Village, CO: Thomson Reuters (Healthcare) Inc. (Accessed 2009).

Diethyl Ether (CAS# 60-29-7)

Summary: We found evidence that diethyl ether has potential for reproductive or developmental toxicity at high doses but available evidence suggests that is unlikely to be in children's products. It was therefore removed from the CSPA reporting list.

Diethyl ether, also known as ethyl ether or ether, is a known CNS toxicant and has been used as an anesthetic for many years in both human and veterinary medicine. The concentration associated with its anesthetic effect is high: 92,000 - 460,000 mg/m3 in humans (NIOSH 1993, RTECS 2009). Ether anesthesia of pregnant animals has been associated with embryoxicity and fetal malformations in rodents (Schwetz, and Becker, 1970, EC 2000). Ether administered to rats immediately after birth, during the period of brain sexual differentiation, resulted in alterations in male fertility and sexual behavior in adulthood (Arena and Pereira, 2002). One epidemiological study reported increased risk of miscarriage and birth defects among female anesthesiologists exposed to medical grade ether although they were concurrently exposed to other anesthetics (NIOSH 1993).

We could not document that ether would be a likely ingredient or residue in children's products covered by CSPA. Ether is a common laboratory solvent and is used as an industrial solvent but has not been reported as a residue in children's products. Ether is still used in pharmaceuticals including liquid wart and corn removers available in over-the-counter products. We found seven corn and wart remover products with ether as an ingredient listed in the Environmental Working Group database: Skin Deep. A search of the NLM household products database also found it as an ingredient in engine starter fluid. Wart remover was initially characterized in Phase 2 as a children's product because the website advertising the product stated that it was "great for kids." Further discussions in Phase 3 determined that children's medicines are not covered under CSPA.

References:

NIOSH RTECS for ethane, 1,1'-oxybis, RTECS# K15775000, CAS# 60-29-7, Updated 2009. http://www.cdc.gov/niosh-rtecs/KI581E98.html

NIOSH (1993) NEG and NIOSH Basis for an Occupational Health Standard for Ethyl Ether. DHHS (NIOSH) Publication number 93-103. http://www.cdc.gov/niosh/pdfs/93-103a.pdf

Schwetz, B.A.; Becker, B.A. (1970). Embryotoxicity and fetal malformations of rats and mice due to maternally administered ether. Abstract 8. Toxicol. Appl. Pharmacol. 17, 275. Data in EPA's HPVIShttp://iaspub.epa.gov/oppthpv/quicksearch.display?pChem=100406

European Commission IUCLID dataset for diethyl ether, February 2000. http://ecb.jrc.ec.europa.eu/iuclid-datasheet/60297.pdf

Arena, AC and Pereira, OC. (2002) Neonatal inhalatory anesthetic exposure: reproductive changes in male rats. Comp Biochem Physiol C Toxicol Pharmacol. Dec; 133(4):633-40.

Mono-2-ethylhexyl phthalate (MEHP); CAS 4376-20-9

Summary: MEHP is a metabolite of di-2-ethylhexyl phthalate (DEHP) that is formed in the body. We could not rule out that some conversion of DEHP to MEHP might occur outside of the body but this would only occur on products that contain DEHP, a chemical already regulated under the federal CPSIA.

MEHP is not a chemical intentionally used during manufacturing. MEHP was added to the CSPA reporting list because it was detected in the urine of people who participated in the NHANES biomonitoring study. Three NHANES biomonitoring studies (1999-2004) have looked for and detected urinary metabolites of DEHP including MEHP. MEHP and other DEHP metabolites were commonly found in the urine of the general population including children ages 6-11 years old. DEHP has been widely used in a number of consumer products and medical devices. DEHP converts to MEHP in the body and may be further metabolized before elimination in the urine. MEHP may be the main toxic metabolite of DEHP.

We found no reports of MEHP detected in children's products and did not find sufficient evidence that MEHP would be present in the absence of DEHP. DEHP is regulated under the federal CPSIA which likely preempts it from the Washington CSPA list. It appears that the hazards of DEHP, and consequently MEHP, are addressed by the federal rule.

References:

ATSDR Toxicological Profile for DEHP (September 2002) http://www.atsdr.cdc.gov/ToxProfiles/tp.asp?id=684&tid=65

National Toxicology program (NTP), Center for the Evaluation of Risks to Human Reproduction (CERHR). Monograph on the potential human reproductive and developmental effects of DEHP. November 2006. http://cerhr.niehs.nih.gov/chemicals/dehp/DEHP-Monograph.pdf

NIH, National Library of Medicine: Hazardous Substances Data Bank (HSDB) file for Bis-(2-ethylhexyl) phthalate. http://toxnet.nlm.nih.gov/cgi-bin/sis/search/f?./temp/~dLRlcq:1

Koo HJ, Lee BM (2005) Human monitoring of phthalates and risk assessment. J Toxicol Environ Health A 68 (16): 1379-92. http://www.ncbi.nlm.nih.gov/pubmed/16009652.

CDC, National Report on Human Exposure to Environmental Chemicals, 4th Report-2009.
DEHP http://www.cdc.gov/exposurereport/data_tables/DEHP_ChemicalInformation.html
Phthalates http://www.cdc.gov/exposurereport/data_tables/chemical_group_12.html

Appendix C:
Reporting Triggers for CSPA Chemicals

CAS	Chemical Name	Recommended Reporting trigger
62-75-9	N-Nitrosodimethylamine	0.001 ppm
119-93-7	3,3´-Dimethylbenzidine and Dyes Metabolized to 3,3´-Dimethylbenzidine	0.01 ppm
71-43-2	Benzene	0.01 ppm
75-01-4	Vinyl chloride	0.01 ppm
75-15-0	Carbon disulfide	0.1 ppm
109-86-4	2-Methoxyethanol	0.1 ppm
131-11-3	Dimethyl phthalate	0.1 ppm
140-66-9	4-tert-Octylphenol; 1,1,3,3-Tetramethyl-4-butylphenol	0.1 ppm
25154-52-3	Nonylphenol	0.1 ppm
62-53-3	Aniline	0.1 ppm
842-07-9	C.I. Solvent Yellow 14	0.1 ppm
95-53-4	2-Aminotoluene	0.1 ppm
104-40-5	4-Nonylphenol	0.1 ppm
100-41-4	Ethylbenzene	1 ppm
100-42-5	Styrene	1 ppm
106-47-8	para-Chloroaniline	1 ppm
107-13-1	Acrylonitrile	1 ppm
108-88-3	Toluene	1 ppm
108-95-2	Phenol	1 ppm
110-80-5	Ethylene glycol monoethyl ester	1 ppm
118-74-1	Hexachlorobenzene	1 ppm
123-91-1	1,4-Dioxane	1 ppm
127-18-4	Perchloroethylene	1 ppm
131-55-5	Benzophenone-2 (2,2',4,4'-tetrahydroxybenzophenone)	1 ppm
140-67-0	Estragole	1 ppm
1763-23-1	Perfluorooctanyl sulphonic acid and its salts (PFOS)	1 ppm
1806-26-4	4-Octyl-phenol	1 ppm
50-00-0	Formaldehyde	1 ppm
5466-77-3	2-Ethyl-hexyl-4-methoxycinnamate	1 ppm
608-93-5	Pentachlorobenzene	1 ppm
71-36-3	n-Butanol	1 ppm
7439-97-6	Mercury & mercury compounds	1 ppm
7439-98-7	Molybdenum & molybdenum compounds	1 ppm
7440-36-0	Antimony & Antimony compounds	1 ppm
7440-38-2	Arsenic & Arsenic compounds	1 ppm

Appendix C:
Reporting Triggers for CSPA Chemicals

CAS	Chemical Name	Recommended Reporting trigger
7440-48-4	Cobalt & Cobalt compounds	1 ppm
75-07-0	Acetaldehyde	1 ppm
75-09-2	Methylene chloride	1 ppm
80-05-7	Bisphenol A	1 ppm
84-66-2	Diethyl phthalate	1 ppm
84-75-3	Di-n-Hexyl Phthalate	1 ppm
85-44-9	Phthalic anhydride	1 ppm
87-68-3	1,1,2,3,4,4-Hexachloro- 1,3-butadiene	1 ppm
99-96-7	p-Hydroxybenzoic acid	1 ppm
7440-41-7	Beryllium & Beryllium compounds	1 ppm
86-30-6	N-Nitrosodiphenylamine	1 ppm
872-50-4	N-Methylpyrrolidone	1 ppm
115968	Tris(2-chloroethyl) phosphate	10 ppm
107-21-1	Ethylene glycol	10 ppm
120-47-8	Ethyl paraben	10 ppm
149-57-5	2-Ethylhexanoic Acid	10 ppm
79-34-5	1,1,2,2-Tetrachloroethane	10 ppm
95-80-7	2,4-Diaminotoluene	10 ppm
94-26-8	Butyl paraben	100 ppm
556-67-2	Octamethylcyclotetrasiloxane	100 ppm
78-93-3	Methyl ethyl ketone (2 butanone)	100 ppm
94-13-3	Propyl paraben	100 ppm
99-76-3	Methyl paraben	100 ppm
25637-99-4	Hexabromocyclododecane	1000 ppm
1163-19-5	2,2',3,3',4,4',5,5',6,6'-Decabromodiphenyl ether (BDE-209)	1000 ppm
25013-16-5	Butylated hydroxyanisole (BHA)	1000 ppm
79-94-7	2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol (TBBPA)	1000 ppm